
COMMONWEALTH of VIRGINIA

Virginia Stormwater Management Regulations 2001

Department of Conservation and Recreation
Division of Soil and Water Conservation
203 Governor Street, Suite 206
Richmond, VA 23219-2094

Phone (804) 786-2064



Department of Conservation & Recreation

CONSERVING VIRGINIA'S NATURAL AND RECREATIONAL RESOURCES

VIRGINIA STORMWATER MANAGEMENT REGULATIONS

INDEX

<u>Stormwater Management Regulations 4VAC3-20-</u>	<u>PAGE</u>
PART I GENERAL	
10. Definitions	1
30. Purposes	5
40. Applicability	5
PART II TECHNICAL CRITERIA	
50. Applicability	6
60. General	6
71. Water Quality	7
81. Stream Channel Erosion	9
85. Flooding	9
86. Regional (Watershed-wide) Stormwater Management Plans	10
PART III LOCAL PROGRAMS	
90. Applicability	10
101. Technical Criteria for Local Programs	11
111. Requirements for Local Program and Ordinance	11
121. Administrative Procedures: Stormwater Management Plans	12
131. Administrative Procedures: Exceptions	13
141. Administrative Procedures: Maintenance and Inspections	13

INDEX (continued)

<u>Stormwater Management Regulations 4VAC3-20-</u> (continued)	<u>PAGE</u>
 PART IV STATE PROJECTS	
210. Technical Criteria and Plan Requirements for State Projects	14
220. Requirements for Stormwater Management Annual Standards and Specifications	15
230. Administrative Procedures: Stormwater Management Plans	15
241. Administrative Procedures: Exceptions	16
245. Administrative Procedures: Maintenance and Inspections	16
 PART V REPORTING	
251. Reporting on Stormwater Management	17

The following is a complete text of the Virginia Stormwater Management Regulations 4VAC3-20 amended by the Board of Conservation and Recreation, effective March 5, 1998

PART I.
GENERAL.

4 VAC 3-20-10. Definitions.

The following words and terms used in this chapter have the following meanings, unless the context clearly indicates otherwise.

"*Act*" means Article 1.1 (§ 10.1-603.1 et seq.) of Chapter 6 of Title 10.1 of the Code of Virginia.

"*Adequate channel*" means a channel that will convey the designated frequency storm event without overtopping the channel banks nor causing erosive damage to the channel bed or banks.

"*Applicant*" means any person submitting a stormwater management plan for approval.

"*Aquatic bench*" means a 10- to 15-foot wide bench around the inside perimeter of a permanent pool that ranges in depth from zero to 12 inches. Vegetated with emergent plants, the bench augments pollutant removal, provides habitats, conceals trash and water level fluctuations, and enhances safety.

"*Average land cover condition*" means a measure of the average amount of impervious surfaces within a watershed, assumed to be 16%. Note that a locality may opt to calculate actual watershed-specific values for the average land cover condition based upon 4 VAC 3-20-101.

"*Best management practice (BMP)*" means a structural or nonstructural practice which is designed to minimize the impacts of development on surface and groundwater systems.

"*Bioretention basin*" means a water quality BMP engineered to filter the water quality volume through an engineered planting bed, consisting of a vegetated surface layer (vegetation, mulch, ground cover), planting soil, and sand bed, and into the in-situ material.

"*Bioretention filter*" means a bioretention basin with the addition of a sand filter collector pipe system beneath the planting bed.

"*Board*" means the Board of Conservation and Recreation.

"*Channel*" means a natural or manmade waterway.

"*Constructed wetlands*" means areas intentionally designed and created to emulate the water quality improvement function of wetlands for the primary purpose of removing pollutants from stormwater.

"*Department*" means the Department of Conservation and Recreation.

"*Development*" means a tract of land developed or to be developed as a unit under single ownership

or unified control which is to be used for any business or industrial purpose or is to contain three or more residential dwelling units.

"Director" means the Director of the Department of Conservation and Recreation.

"Flooding" means a volume of water that is too great to be confined within the banks or walls of the stream, water body or conveyance system and that overflows onto adjacent lands, causing or threatening damage.

"Grassed swale" means an earthen conveyance system which is broad and shallow with erosion resistant grasses and check dams, engineered to remove pollutants from stormwater runoff by filtration through grass and infiltration into the soil.

"Impervious cover" means a surface composed of any material that significantly impedes or prevents natural infiltration of water into soil. Impervious surfaces include, but are not limited to, roofs, buildings, streets, parking areas, and any concrete, asphalt, or compacted gravel surface.

"Infiltration facility" means a stormwater management facility which temporarily impounds runoff and discharges it via infiltration through the surrounding soil. While an infiltration facility may also be equipped with an outlet structure to discharge impounded runoff, such discharge is normally reserved for overflow and other emergency conditions. Since an infiltration facility impounds runoff only temporarily, it is normally dry during nonrainfall periods. Infiltration basin, infiltration trench, infiltration dry well, and porous pavement shall be considered infiltration facilities.

"Inspection" means an on-site review of the project's compliance with the approved plan, the local stormwater management program, and any applicable design criteria.

"Land development" or *"land development project"* means a manmade change to, or construction on, the land surface, except as exempted in the Stormwater Management Act, § 10.1-603.8 B of the Code of Virginia, that changes its runoff characteristics.

"Linear development project" means a land development project that is linear in nature such as, but not limited to, (i) the construction of electric and telephone utility lines, and natural gas pipelines; (ii) construction of tracks, rights-of-way, bridges, communication facilities and other related structures of a railroad company; and (iii) highway construction projects.

"Local stormwater management program" or *"local program"* means a statement of the various methods adopted pursuant to the Act and implemented by a locality to manage the runoff from land development projects and shall include an ordinance with provisions to require the control of after-development stormwater runoff rate of flow, the proper maintenance of stormwater management facilities, and minimum administrative procedures consistent with this chapter.

"Locality" means a county, city, or town.

"Nonpoint source pollution" means contaminants such as sediment, nitrogen and phosphorous, hydrocarbons, heavy metals, and toxics whose sources cannot be pinpointed but rather are washed

from the land surface in a diffuse manner by stormwater runoff.

"Nonpoint source pollutant runoff load" or *"pollutant discharge"* means the average amount of a particular pollutant measured in pounds per year, delivered in a diffuse manner by stormwater runoff.

"Percent impervious" means the impervious area within the site divided by the area of the site multiplied by 100.

"Person" means any individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility, cooperative, county, city, town or other political subdivision of the Commonwealth, any interstate body or any other legal entity.

"Planning area" means a designated portion of the parcel on which the land development project is located. Planning areas shall be established by delineation on a master plan. Once established, planning areas shall be applied consistently for all future projects.

"Post-development" refers to conditions that reasonably may be expected or anticipated to exist after completion of the land development activity on a specific site or tract of land.

"Pre-development" refers to the conditions that exist at the time that plans for the land development of a tract of land are approved by the plan approval authority. Where phased development or plan approval occurs (preliminary grading, roads and utilities, etc.), the existing conditions at the time *prior to* the first item being approved or permitted shall establish pre-development conditions.

"Regional (watershed-wide) stormwater management facility" or *"regional facility"* means a facility or series of facilities designed to control stormwater runoff from a specific watershed, although only portions of the watershed may experience land development.

"Regional (watershed-wide) stormwater management plan" or *"regional plan"* means a document containing material describing how runoff from open space, existing development and future planned development areas within a watershed will be controlled by coordinated design and implementation of regional stormwater management facilities.

"Runoff" or *"stormwater runoff"* means that portion of precipitation that is discharged across the land surface or through conveyances to one or more waterways.

"Sand filter" means a contained bed of sand which acts to filter the first flush of runoff. The runoff is then collected beneath the sand bed and conveyed to an adequate discharge point or infiltrated into the in-situ soils.

"Shallow marsh" means a zone within a stormwater extended detention basin that exists from the surface of the normal pool to a depth of six to 18 inches, and has a large surface area and, therefore, requires a reliable source of baseflow, groundwater supply, or a sizeable drainage area, to maintain the desired water surface elevations to support emergent vegetation.

"*Site*" means the parcel of land being developed, or a designated planning area in which the land development project is located.

"*State project*" means any land development project which is undertaken by any state agency, board, commission, authority or any branch of state government, including state supported institutions of higher learning.

"*Stormwater detention basin*" or "*detention basin*" means a stormwater management facility which temporarily impounds runoff and discharges it through a hydraulic outlet structure to a downstream conveyance system. While a certain amount of outflow may also occur via infiltration through the surrounding soil, such amounts are negligible when compared to the outlet structure discharge rates and are, therefore, not considered in the facility's design. Since a detention facility impounds runoff only temporarily, it is normally dry during nonrainfall periods.

"*Stormwater extended detention basin*" or "*extended detention basin*" means a stormwater management facility which temporarily impounds runoff and discharges it through a hydraulic outlet structure over a specified period of time to a downstream conveyance system for the purpose of water quality enhancement or stream channel erosion control. While a certain amount of outflow may also occur via infiltration through the surrounding soil, such amounts are negligible when compared to the outlet structure discharge rates and, therefore, are not considered in the facility's design. Since an extended detention basin impounds runoff only temporarily, it is normally dry during nonrainfall periods.

"*Stormwater extended detention basin-enhanced*" or "*extended detention basin-enhanced*" means an extended detention basin modified to increase pollutant removal by providing a shallow marsh in the lower stage of the basin.

"*Stormwater management facility*" means a device that controls stormwater runoff and changes the characteristics of that runoff including, but not limited to, the quantity and quality, the period of release or the velocity of flow.

"*Stormwater management plan*" or "*plan*" means a document containing material for describing how existing runoff characteristics will be affected by a land development project and methods for complying with the requirements of the local program or this chapter.

"*Stormwater retention basin*" or "*retention basin*" means a stormwater management facility which includes a permanent impoundment, or normal pool of water, for the purpose of enhancing water quality and, therefore, is normally wet, even during nonrainfall periods. Storm runoff inflows may be temporarily stored above this permanent impoundment for the purpose of reducing flooding, or stream channel erosion.

"*Stormwater retention basin I*" or "*retention basin I*" means a retention basin with the volume of the permanent pool equal to three times the water quality volume.

"*Stormwater retention basin II*" or "*retention basin II*" means a retention basin with the volume of the permanent pool equal to four times the water quality volume.

“Stormwater retention basin III” or *“retention basin III”* means a retention basin with the volume of the permanent pool equal to four times the water quality volume with the addition of an aquatic bench.

“Subdivision” unless otherwise defined in a local ordinance adopted pursuant to § 15.1-465 of the Code of Virginia, means the division of a parcel of land into three or more lots or parcels of less than five acres each for the purpose of transfer of ownership or building development, or, if a new street is involved in such division, any division of a parcel of land. The term includes resubdivision and, when appropriate to the context, shall relate to the process of subdividing or to the land subdivided.

“Vegetated filter strip” means a densely vegetated section of land engineered to accept runoff as overland sheet flow from upstream development. It shall adopt any natural vegetated form, from grassy meadow to small forest. The vegetative cover facilitates pollutant removal through filtration, sediment deposition, infiltration and absorption, and is dedicated for that purpose.

“Water quality volume” means the volume equal to the first 1/2 inch of runoff multiplied by the impervious surface of the land development project.

“Watershed” means a defined land area drained by a river, stream or drainage ways or system of connecting rivers, streams, or drainage ways such that all surface water within the area flows through a single outlet.

4 VAC 3-20-30. Purposes.

The purposes of this chapter are to provide a framework for the administration, implementation and enforcement of the Act, while at the same time providing flexibility for innovative solutions to stormwater management issues.

4 VAC 3-20-40. Applicability.

This chapter is applicable to:

1. Every locality that establishes a local stormwater management program; and
2. Every state project.

PART II.
TECHNICAL CRITERIA.

4 VAC 3-20-50. Applicability.

This part specifies technical criteria for localities that establish a local stormwater management program and for state projects.

4 VAC 3-20-60. General.

A. Determination of flooding and channel erosion impacts to receiving streams due to land development projects shall be measured at each point of discharge from the development project and such determination shall include any runoff from the balance of the watershed which also contributes to that point of discharge.

B. The specified design storms shall be defined as either a 24-hour storm using the rainfall distribution recommended by the U.S. Soil Conservation Service when using U.S. Soil Conservation Service methods or as the storm of critical duration that produces the greatest required storage volume at the site when using a design method such as the Modified Rational Method.

C. For purposes of computing runoff, all pervious lands in the site shall be assumed prior to development to be in good condition (if the lands are pastures, lawns, or parks), with good cover (if the lands are woods), or with conservation treatment (if the lands are cultivated); regardless of conditions existing at the time of computation.

D. Construction of stormwater management facilities or modifications to channels shall comply with all applicable laws and regulations. Evidence of approval of all necessary permits shall be presented.

E. Impounding structures that are not covered by the Impounding Structure Regulations (4 VAC 50-20-10 et seq.) shall be engineered for structural integrity during the 100-year storm event.

F. Pre-development and post-development runoff rates shall be verified by calculations that are consistent with good engineering practices.

G. Outflows from a stormwater management facility shall be discharged to an adequate channel, and velocity dissipators shall be placed at the outfall of all stormwater management facilities and along the length of any outfall channel as necessary to provide a nonerosive velocity of flow from the basin to a channel.

H. Proposed residential, commercial, or industrial subdivisions shall apply these stormwater management criteria to the land development as a whole. Individual lots in new subdivisions shall not be considered separate land development projects, but rather the entire subdivision shall be considered a single land development project. Hydrologic parameters shall reflect the ultimate land development

and shall be used in all engineering calculations.

I. All stormwater management facilities shall have a maintenance plan which identifies the owner and the responsible party for carrying out the maintenance plan.

J. Construction of stormwater management impoundment structures within a Federal Emergency Management Agency (FEMA) designated 100-year floodplain shall be avoided to the extent possible. When this is unavoidable, all stormwater management facility construction shall be in compliance with all applicable regulations under the National Flood Insurance Program, 44 CFR Part 59.

K. Natural channel characteristics shall be preserved to the maximum extent practicable.

L. Land development projects shall comply with the Virginia Erosion and Sediment Control Act and attendant regulations.

4 VAC 3-20-71. Water quality.

A. Compliance with the water quality criteria may be achieved by applying the performance-based criteria or the technology-based criteria to either the site or a planning area.

B. Performance-based criteria. For land development, the calculated post-development nonpoint source pollutant runoff load shall be compared to the calculated pre-development load based upon the average land cover condition or the existing site condition. A BMP shall be located, designed, and maintained to achieve the target pollutant removal efficiencies specified in Table 1 to effectively reduce the pollutant load to the required level based upon the following four applicable land development situations for which the performance criteria apply:

1. Situation 1 consists of land development where the existing percent impervious cover is less than or equal to the average land cover condition and the proposed improvements will create a total percent impervious cover which is less than the average land cover condition.

Requirement: No reduction in the after development pollutant discharge is required.

2. Situation 2 consists of land development where the existing percent impervious cover is less than or equal to the average land cover condition and the proposed improvements will create a total percent impervious cover which is greater than the average land cover condition.

Requirement: The pollutant discharge after development shall not exceed the existing pollutant discharge based on the average land cover condition.

3. Situation 3 consists of land development where the existing percent impervious cover is greater than the average land cover condition.

Requirement: The pollutant discharge after development shall not exceed (i) the pollutant discharge based on existing conditions less 10% or (ii) the pollutant discharge based on the

average land cover condition, whichever is greater.

4. Situation 4 consists of land development where the existing percent impervious cover is served by an existing stormwater management BMP that addresses water quality.

Requirement: The pollutant discharge after development shall not exceed the existing pollutant discharge based on the existing percent impervious cover while served by the existing BMP.

The existing BMP shall be shown to have been designed and constructed in accordance with proper design standards and specifications, and to be in proper functioning condition.

C. Technology-based criteria. For land development, the post-developed stormwater runoff from the impervious cover shall be treated by an appropriate BMP as required by the post-developed condition percent impervious cover as specified in Table 1. The selected BMP shall be located, designed, and maintained to perform at the target pollutant removal efficiency specified in Table 1. Design standards and specifications for the BMPs in Table 1 which meet the required target pollutant removal efficiency will be available at the department.

Table 1*

Water Quality BMP	Target Phosphorus Removal Efficiency	Percent Impervious Cover
Vegetated filter strip	10%	16-21%
Grassed swale	15%	
Constructed wetlands	30%	22 -37%
Extended detention (2 x WQ Vol)	35%	
Retention basin I (3 x WQ Vol)	40%	
Bioretention basin	50%	38 -66%
Bioretention filter	50%	
Extended detention-enhanced	50%	
Retention basin II (4 x WQ Vol)	50%	
Infiltration (1 x WQ Vol)	50%	
Sand filter	65%	67 -100%
Infiltration (2 x WQ Vol)	65%	
Retention basin III (4 x WQ Vol	65%	
with aquatic bench)		

* Innovative or alternate BMPs not included in this table may be allowed at the discretion of the local program administrator or the Department. Innovative or alternate BMPs not included in this table which target appropriate nonpoint source pollution other than phosphorous may be allowed at the discretion of the local program administrator or the Department.

4 VAC 3-20-81. Stream channel erosion.

A. Properties and receiving waterways downstream of any land development project shall be protected from erosion and damage due to increases in volume, velocity and peak flow rate of stormwater runoff in accordance with the minimum design standards set out in this section.

B. The plan approving authority shall require compliance with subdivision 19 of 4 VAC 50-30-40 of the Erosion and Sediment Control Regulations, promulgated pursuant to Article 4 (§ 10.1-560 et seq.) of Chapter 5 of Title 10.1 of the Code of Virginia.

C. The plan approving authority may determine that some watersheds or receiving stream systems require enhanced criteria in order to address the increased frequency of bankfull flow conditions brought on by land development projects. Therefore, in lieu of the reduction of the 2-year post-developed peak rate of runoff as required in subsection B of this section, the land development project being considered shall provide 24-hour extended detention of the runoff generated by the 1-year, 24-hour duration storm.

D. In addition to subsections B and C of this section, localities may, by ordinance, adopt more stringent channel analysis criteria or design standards to ensure that the natural level of channel erosion, to the maximum extent practicable, will not increase due to the land development projects. These criteria may include, but are not limited to, the following:

1. Criteria and procedures for channel analysis and classification.
2. Procedures for channel data collection.
3. Criteria and procedures for the determination of the magnitude and frequency of natural sediment transport loads.
4. Criteria for the selection of proposed natural or man-made channel linings.

4 VAC 3-20-85. Flooding.

A. Downstream properties and waterways shall be protected from damages from localized flooding due to increases in volume, velocity and peak flow rate of stormwater runoff in accordance with the minimum design standards set out in this section.

B. The 10-year post-developed peak rate of runoff from the development site shall not exceed the 10-year pre-developed peak rate of runoff.

C. In lieu of subsection B of this section, localities may, by ordinance, adopt alternate design criteria based upon geographic, land use, topographic, geologic factors or other downstream conveyance factors as appropriate.

D. Linear development projects shall not be required to control post-developed stormwater runoff for

flooding, except in accordance with a watershed or regional stormwater management plan.

4 VAC 3-20-86. Regional (watershed-wide) stormwater management plans.

This section enables localities to develop regional stormwater management plans. State agencies intending to develop large tracts of land such as campuses or prison compounds are encouraged to develop regional plans where practical.

The objective of a regional stormwater management plan is to address the stormwater management concerns in a given watershed with greater economy and efficiency by installing regional stormwater management facilities versus individual, site-specific facilities. The result will be fewer stormwater management facilities to design, build and maintain in the affected watershed. It is also anticipated that regional stormwater management facilities will not only help mitigate the impacts of new development, but may also provide for the remediation of erosion, flooding or water quality problems caused by existing development within the given watershed.

If developed, a regional plan shall, at a minimum, address the following:

1. The specific stormwater management issues within the targeted watersheds.
2. The technical criteria in 4 VAC 3-20-50 through 4 VAC 3-20-85 as needed based on subdivision 1 of this section.
3. The implications of any local comprehensive plans, zoning requirements and other planning documents.
4. Opportunities for financing a watershed plan through cost sharing with neighboring agencies or localities, implementation of regional stormwater utility fees, etc.
5. Maintenance of the selected stormwater management facilities.
6. Future expansion of the selected stormwater management facilities in the event that development exceeds the anticipated level.

PART III. LOCAL PROGRAMS.

4 VAC 3-20-90. Applicability.

This part specifies technical criteria, minimum ordinance requirements, and administrative procedures for all localities operating local stormwater management programs.

4 VAC 3-20-101. Technical criteria for local programs.

A. All local stormwater management programs shall comply with the general technical criteria as outlined in 4 VAC 3-20-60.

B. All local stormwater management programs which contain provisions for stormwater runoff quality shall comply with 4 VAC 3-20-71. A locality may establish criteria for selecting either the site or a planning area on which to apply the water quality criteria. A locality may opt to calculate actual watershed specific or locality wide values for the average land cover condition based upon:

1. Existing land use data at time of local Chesapeake Bay Preservation Act Program or Department storm water management program adoption, whichever was adopted first,
2. Watershed or locality size, and
3. Determination of equivalent values of impervious cover for nonurban land uses which contribute nonpoint source pollution, such as agriculture, forest, etc.

C. All local stormwater management programs which contain provisions for stream channel erosion shall comply with 4 VAC 3-20-81.

D. All local stormwater management programs must contain provisions for flooding and shall comply with 4 VAC 3-20-85.

E. All local stormwater management programs which contain provisions for watershed or regional stormwater management plans shall comply with 4 VAC 3-20-101.

F. A locality that has adopted more stringent requirements or implemented a regional (watershed-wide) stormwater management plan may request, in writing, that the department consider these requirements in its review of state projects within that locality.

G. Nothing in this part shall be construed as authorizing a locality to regulate, or to require prior approval by the locality for, a state project.

4 VAC 3-20-111. Requirements for local program and ordinance.

A. At a minimum, the local stormwater management program and implementing ordinance shall meet the following:

1. The ordinance shall identify the plan-approving authority and other positions of authority within the program, and shall include the regulations and technical criteria to be used in the program.
2. The ordinance shall include procedures for submission and approval of plans, issuance of permits, monitoring and inspections of land development projects. The party responsible for conducting inspections shall be identified. The local program authority shall maintain, either on-site or in local program files, a copy of the approved plan and a record of all inspections for each land

development project.

B. The department shall periodically review each locality's stormwater management program, implementing ordinance, and amendments. Subsequent to this review, the department shall determine if the program and ordinance are consistent with the state stormwater management regulations and notify the locality of its findings. To the maximum extent practicable the department will coordinate the reviews with other local government program reviews to avoid redundancy. The review of a local program shall consist of the following:

1. A personal interview between department staff and the local program administrator or his designee;
2. A review of the local ordinance and other applicable documents;
3. A review of plans approved by the locality and consistency of application;
4. An inspection of regulated activities; and
5. A review of enforcement actions.

C. Nothing in this chapter shall be construed as limiting the rights of other federal and state agencies from imposing stricter technical criteria or other requirements as allowed by law.

4 VAC 3-20-121. Administrative procedures: stormwater management plans.

A. Localities shall approve or disapprove stormwater management plans according to the following:

1. A maximum of 60 calendar days from the day a complete stormwater management plan is accepted for review will be allowed for the review of the plan. During the 60-day review period, the locality shall either approve or disapprove the plan and communicate its decision to the applicant in writing. Approval or denial shall be based on the plan's compliance with the locality's stormwater management program.
2. A disapproval of a plan shall contain the reasons for disapproval.

B. Each plan approved by a locality shall be subject to the following conditions:

1. The applicant shall comply with all applicable requirements of the approved plan, the local program, this chapter and the Act, and shall certify that all land clearing, construction, land development and drainage will be done according to the approved plan.
2. The land development project shall be conducted only within the area specified in the approved plan.
3. The locality shall be allowed, after giving notice to the owner, occupier or operator of the land development project, to conduct periodic inspections of the project.

4. The person responsible for implementing the approved plan shall conduct monitoring and submit reports as the locality may require to ensure compliance with the approved plan and to determine whether the plan provides effective stormwater management.
5. No changes may be made to an approved plan without review and written approval by the locality.

4 VAC 3-20-131. Administrative procedures: exceptions.

- A. A request for an exception shall be submitted, in writing, to the locality. An exception from the stormwater management regulations may be granted, provided that: (i) exceptions to the criteria are the minimum necessary to afford relief and (ii) reasonable and appropriate conditions shall be imposed as necessary upon any exception granted so that the intent of the Act and this chapter are preserved.
- B. Economic hardship is not sufficient reason to grant an exception from the requirements of this chapter.

4 VAC 3-20-141. Administrative procedures: maintenance and inspections.

- A. Responsibility for the operation and maintenance of stormwater management facilities, unless assumed by a governmental agency, shall remain with the property owner and shall pass to any successor or owner. If portions of the land are to be sold, legally binding arrangements shall be made to pass the basic responsibility to successors in title. These arrangements shall designate for each project the property owner, governmental agency, or other legally established entity to be permanently responsible for maintenance.
- B. In the case of developments where lots are to be sold, permanent arrangements satisfactory to the locality shall be made to ensure continued performance of this chapter.
- C. A schedule of maintenance inspections shall be incorporated into the local ordinance. Ordinances shall provide that in cases where maintenance or repair is neglected, or the stormwater management facility becomes a danger to public health or safety, the locality has the authority to perform the work and to recover the costs from the owner.
- D. Localities may require right-of-entry agreements or easements from the applicant for purposes of inspection and maintenance.
- E. Periodic inspections are required for all stormwater management facilities. Localities shall either:
 1. Provide for inspection of stormwater management facilities on an annual basis; or
 2. Establish an alternative inspection program which ensures that stormwater management facilities are functioning as intended. Any alternative inspection program shall be:
 - a. Established in writing;

- b. Based on a system of priorities that, at a minimum, considers the purpose of the facility, the contributing drainage area, and downstream conditions; and
 - c. Documented by inspection records.
- F. During construction of the stormwater management facilities, localities shall make inspections on a regular basis.
- G. Inspection reports shall be maintained as part of a land development project file.

PART IV. STATE PROJECTS.

4 VAC 3-20-210. Technical criteria and plan requirements for state projects.

- A. This part specifies technical criteria and administrative procedures for all state projects.
- B. Stormwater management plans prepared for state projects shall comply with the technical criteria outlined in Part II (4 VAC 3-20-50 et seq.) of this chapter and, to the maximum extent practicable, any local stormwater management program technical requirements adopted pursuant to the Act. It shall be the responsibility of the state agency to demonstrate that the local program technical requirements are not practical for the project under consideration.
- C. The department may establish criteria for selecting either the site or a planning area on which to apply the water quality criteria.
- D. As a minimum, stormwater management plans and computations shall contain the following:
 - 1. The location and the design of the proposed stormwater management facilities.
 - 2. Overall site plan with pre-developed and post-developed condition drainage area maps.
 - 3. Comprehensive hydrologic and hydraulic computations of the pre-development and post-development runoff conditions for the required design storms, considered individually.
 - 4. Calculations verifying compliance with the water quality requirements.
 - 5. A description of the requirements for maintenance of the stormwater management facilities and a recommended schedule of inspection and maintenance.
 - 6. The identification of a person or persons who will be responsible for maintenance.
 - 7. All stormwater management plans shall be appropriately sealed and signed by a professional in adherence to all minimum standards and requirements pertaining to the practice of that profession

in accordance with Chapter 4 (§ 54.1-400 et seq.) of Title 54.1 of the Code of Virginia and attendant regulations.

4 VAC3-20-220. Requirements for stormwater management annual standards and specifications.

A. A request for approval of stormwater management standards and specifications may be submitted to the department by a state agency on an annual basis. At a minimum, the following certifications shall accompany the request:

1. Individual stormwater management plans shall be prepared for each of the state projects.
2. The stormwater management plans shall comply with the technical criteria as outlined in Part II (4 VAC 3-20-50 et seq.) of this chapter and, to the maximum extent practicable, any local stormwater management program technical requirements adopted pursuant to the Stormwater Management Act. It shall be the responsibility of the state agency to demonstrate that the local program technical requirements are not practical for the project under consideration.
3. An inspection and maintenance schedule shall be developed and implemented.

B. Copies of such stormwater management specifications and standards including, but not limited to, design manuals, technical guides and handbooks, shall be submitted.

VAC 3-20-230. Administrative procedures: stormwater management plans.

A. Within 30 days after receipt of a complete stormwater management plan submitted by a state agency, the department shall approve or disapprove the plan.

1. The department shall transmit its decision in writing to the state agency which submitted the plan.
2. Disapproved plans shall be revised and resubmitted to the department.

B. Approval of a stormwater management plan for a state project shall be subject to the following conditions:

1. The state agency shall comply with all applicable requirements of the approved plan and this chapter, and shall certify that all land clearing, construction, land development, and drainage will be done according to the approved plan.
2. The land development shall be conducted only within the area specified in the approved plan.
3. No changes may be made to an approved plan without review and written approval by the department.
4. The department shall be notified one week prior to the pre-construction meeting and one week prior to the commencement of land disturbing activity.

5. The department shall conduct periodic inspections of the project to ensure compliance with the plan.

6. The department may require monitoring and reports from the state agency responsible for implementing the plan to ensure compliance with the plan and to determine if the measures required in the plan provide effective stormwater management.

C. Compliance with approved plans shall be subject to the following conditions:

1. Where inspections by department personnel reveal deficiencies in carrying out an approved plan, the responsible state agency shall be issued a notice to comply, with corrective actions specified and the deadline within which the work shall be performed.

2. Whenever the Commonwealth or any of its agencies fail to comply within the time provided in a notice to comply, the director may petition the secretary of a given secretariat or an agency head for a given state agency for compliance. Where the petition does not achieve timely compliance, the director shall bring the matter to the Governor for resolution.

3. Where compliance will require the appropriation of funds, the director shall cooperate with the appropriate agency head in seeking such an appropriation; where the director determines that an emergency exists, he shall petition the Governor for funds from the Civil Contingency Fund or other appropriate source.

4 VAC 3-20-241. Administrative procedures: exceptions.

A. A request for an exception shall be submitted, in writing, to the department. An exception from the stormwater management regulations may be granted, provided that: (i) exceptions to the criteria are the minimum necessary to afford relief and (ii) reasonable and appropriate conditions shall be imposed as necessary upon any exception granted so that the purpose and intent of the Act is preserved.

B. Economic hardship is not sufficient reason to grant an exception from the requirements of this chapter.

4 VAC 3-20-245. Administrative procedures: maintenance and inspections.

A. Responsibility for the operation and maintenance of stormwater management facilities shall remain with the state agency and shall pass to any successor or owner. If portions of the land are to be sold, legally binding arrangements shall be made to pass the basic responsibility to successors in title. These arrangements shall designate for each state project the property owner, governmental agency, or other legally established entity to be permanently responsible for maintenance.

B. At a minimum, a stormwater management facility shall be inspected on an annual basis and after any storm which causes the capacity of the facility principal spillway to be exceeded.

- C. During construction of the stormwater management facilities, the department shall make inspections on a regular basis.
- D. Inspection reports shall be maintained as part of the land development project file.

PART V.
REPORTING.

4 VAC 3-20-251. Reporting on stormwater management.

The department is required to report to the General Assembly on the extent to which stormwater management programs have reduced nonpoint source pollution to the Commonwealth's waters and mitigated the effects of localized flooding. In order to complete this report, localities with stormwater management programs and state agencies may be asked to voluntarily submit an annual report to the department. Such a request may suggest reporting of data on the number and types of stormwater management facilities installed in the preceding year, the drainage area or watershed size served, the receiving stream or hydrologic unit, a summary of monitoring data, if any, and other data useful in determining the effectiveness of the programs and BMP technologies in current use.